REMARKS

Claims 1-35 are pending in the above-identified application. The Examiner rejected claims 1-35.

I. PREVIOUSLY FILED POWER OF ATTORNEY, REVOCATION OF PRIOR POWERS AND CHANGE OF CORRESPONDENCE ADDRESS

The Office Action was erroneously sent to Christie, Parker & Hale, LLP of Pasadena, California. Christie, Parker & Hale held the previous power of attorney and was the previous correspondence address. However, Applicants respectfully draw the attention of the Examiner to the communication of December 13, 2001, in which all previous powers of attorney were revoked and McAndrews, Held & Malloy of Chicago, Illinois was appointed to prosecute and transact all business in the U.S. Patent and Trademark Office relating to the above-identified application. In addition, McAndrews, Held & Malloy was listed as the correspondence address. As a courtesy, Applicants have attached a copy of the communication of December 13, 2001.

Applicants respectfully request that future correspondence be sent to McAndrews, Held & Malloy.

II. ATTORNEY DOCKET NUMBER

Applicants respectfully request that the attorney docket number be changed from "36979/FLC/B600" to --13450US02--.

III. REJECTION UNDER 35 U.S.C. § 102(b) WITH RESPECT TO CLAIMS 5-12, 17-24 AND 29-35

Claims 5-12, 17-24 and 29-35 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,347,524 ("l'Anson"). Applicants respectfully traverse the rejection.

A. Claims 5-7

To maintain an anticipation rejection, I'Anson must describe each and every element as set forth in claim 5. However, l'Anson does not describe each and every element as set forth in claim 5. For example, claim 5 recites "recording a state machine sequence from the state

machine". Instead, I'Anson only shows the recording of a single state (i.e., a current state). See, e.g., col. 7, lines 66-68, and col. 8, lines 1-2 ("the contents of the next state store 29 are transferred to the current state memory 27 (so erasing its previous contents) in readiness for the reception of the next PDU type"). Thus, I'Anson never records a state machine *sequence*. In addition, Applicants respectfully note that the FIFO 16, as set forth in I'Anson, stores PDU types which I'Anson differentiates from states. See, e.g., col. 5, lines 56-60; and FIG. 3 illustrating states s1 to s5 with PDU types shown as transitions.

In another example, claim 5 recites "selecting from the plurality of expected state machine sequences a selected expected state machine sequence that matches the state machine sequence". I'Anson does not describe selecting a selected expected state machine sequence that matches the state machine sequence. I'Anson does not even describe matching one sequence to another sequence. The matrix store 25 illustrated in FIG. 5 only generates the next state when fed a PDU type and a current state. I'Anson does not mention any sequences and does not describe matching sequences. In addition, Applicants respectfully note that the match unit 15 as set forth in I'Anson only uses connection-identifying parameters to identify PDUs relevant to the connection of interest. See, e.g., col. 6, lines 56-61. I'Anson does not describe either PDUs or PDU types as states. Thus, the match unit 15 does not match any state machine sequences.

In yet another example, claim 5 recites "determining the status of the adaptive system based on the selected expected state machine sequence". Applicants respectfully submit that I'Anson does not mention state machine sequences and, in particular, expected state machine sequences.

For at least the above reasons, Applicants respectfully submit that I'Anson does not describe each and every element as set forth in claim 5 and thus does not anticipate claim 5. Since I'Anson does not anticipate claim 5, I'Anson does not anticipate claims 6-8 which depend from claim 5.

Furthermore, claims 6-8 contain patentable subject matter. For example, claim 6 recites "wherein the plurality of expected state machine sequences are normalized based on a sample frequency of the state machine sequence". The Examiner alleges that col. 7, lines 19-21, is relevant to an anticipation argument. Applicants strongly disagree. The cited text merely describes that the processing unit 17, which is illustrated in detail in FIG. 5, updates the memory 27 to hold a new current protocol state. There is no mention of normalization and no mention of

a sample frequency and no mention of a state machine sequence. In another example, claim 7 recites "wherein an approximate string matching algorithm is used to match the selected expected state machine sequence and the state machine sequence". The Examiner alleges that col. 7, lines 11-14 is relevant to an anticipation argument. Applicants strongly disagree. The cited text merely describes the operation of the processing unit 17 after a PDU type has passed the match unit 15. The processing unit 17 is more clearly shown in FIG. 5. Applicants respectfully reiterate that I'Anson defines a state as not including PDUs or PDU types. See, e.g., col. 5, lines 56-60; and FIG. 3 illustrating states s1 to s5 with PDU types shown as transitions. Thus, neither the match unit 15 nor the processing unit 17 is matching any state machine sequences. Furthermore, the cited text makes no mention of an approximate string matching algorithm.

For at least the above reasons, it is respectfully requested that the rejection under 35 U.S.C. § 102(b) be withdrawn with respect to claims 5-8.

B. Claims 9-12

To maintain an anticipation rejection, I'Anson must describe each and every element as set forth in claim 9. However, I'Anson does not describe each and every element as set forth in claim 9. For example, claim 9 recites "recording a state machine sequence from the state machine" and "selecting from the plurality of expected state machine sequences a selected expected state machine sequence that matches the state machine sequence". These elements were identically recited in claim 5. Accordingly, Applicants respectfully submit that the arguments made with respect to claim 5 be made with respect to claim 9. In addition, claim 9 recites "determining the status of the real-time system based on the selected expected state machine sequence". Applicants respectfully submit that I'Anson does not mention state machine sequences and, in particular, expected state machine sequences.

For at least the above reasons, Applicants respectfully submit that I'Anson does not describe each and every element as set forth in claim 9 and thus does not anticipate claim 9. Since I'Anson does not anticipate claim 9, I'Anson does not anticipate claims 10-12 which depend from claim 9.

Furthermore, claims 10-12 contain patentable subject matter. For example, claims 10 and 12 recite element which are identical to claims 6 and 7. Accordingly, Applicants respectfully submit that the arguments made with respect to claims 6 and 7 be made with respect to claims 10

and 12. In yet another example, claim 11 recites "wherein the state machine sequence is recorded by the state machine". The Examiner alleges that col. 7, lines 19-21, is relevant to an anticipation argument. Applicants strongly disagree. The cited text merely describes that the processing unit 17, which is illustrated in detail in FIG. 5, updates the memory 27 to hold a new current protocol state. I'Anson only shows the recording of a single state (i.e., a current state). See, e.g., col. 7, lines 66-68, and col. 8, lines 1-2 ("the contents of the next state store 29 are transferred to the current state memory 27 (so erasing its previous contents) in readiness for the reception of the next PDU type"). Thus, I'Anson never records a state machine *sequence*. In addition, Applicants respectfully note that the FIFO 16 as set forth in I'Anson PDU types which I'Anson differentiates from states. See, e.g., col. 5, lines 56-60; and FIG. 3 illustrating states s1 to s5 with PDU types shown as transitions.

For at least the above reasons, it is respectfully requested that the rejection under 35 U.S.C. § 102(b) be withdrawn with respect to claims 9-12.

C. Claims 17-20

To maintain an anticipation rejection, I'Anson must describe each and every element as set forth in claim 17. However, I'Anson does not describe each and every element as set forth in claim 17. For example, claim 17 recites "recording a state machine sequence from the state machine", "selecting from the plurality of expected state machine sequences a selected expected state machine sequence that matches the state machine sequence", and "determining the status of the adaptive system based on the selected expected state machine sequence". These elements were identically recited in claim 5. Accordingly, Applicants respectfully submit that the arguments made with respect to claim 5 be made with respect to claim 17.

For at least the above reasons, Applicants respectfully submit that I'Anson does not describe each and every element as set forth in claim 17 and thus does not anticipate claim 17. Since I'Anson does not anticipate claim 17, I'Anson does not anticipate claims 18-20 which depend from claim 17.

Furthermore, claims 18-20 contain patentable subject matter. For example, claims 18 and 19 recite similar language as recited in claims 6 and 7. Accordingly, Applicants respectfully submit that the arguments made with respect to claims 6 and 7 be made with respect to claims 18 and 19.

For at least the above reasons, it is respectfully requested that the rejection under 35 U.S.C. § 102(b) be withdrawn with respect to claims 17-20.

D. Claims 21-24

To maintain an anticipation rejection, I'Anson must describe each and every element as set forth in claim 21. However, I'Anson does not describe each and every element as set forth in claim 21. For example, claim 21 recites "recording a state machine sequence from the state machine", "selecting from the plurality of expected state machine sequences a selected expected state machine sequence that matches the state machine sequence", and "determining the status of the real-time system based on the selected expected state machine sequence". These elements were identically recited in claim 9. Accordingly, Applicants respectfully submit that the arguments made with respect to claim 9 be made with respect to claim 21.

For at least the above reasons, Applicants respectfully submit that I'Anson does not describe each and every element as set forth in claim 21 and thus does not anticipate claim 21. Since I'Anson does not anticipate claim 21, I'Anson does not anticipate claims 22-24 which depend from claim 21.

Furthermore, claims 22-24 contain patentable subject matter. For example, claims 22-24 recite similar language as recited in claims 10-12. Accordingly, Applicants respectfully submit that the arguments made with respect to claims 10-12 be made with respect to claims 22-24.

For at least the above reasons, it is respectfully requested that the rejection under 35 U.S.C. § 102(b) be withdrawn with respect to claims 21-24.

E. Claims 29-32

To maintain an anticipation rejection, I'Anson must describe each and every element as set forth in claim 29. However, I'Anson does not describe each and every element as set forth in claim 29. For example, claim 29 recites "recording a state machine sequence from the state machine", "selecting from the plurality of expected state machine sequences a selected expected state machine sequence matching the state machine sequence", and "determining the status of the adaptive system based on the selected expected state machine sequence". These elements recite language which is similar to language recited in claim 5. Accordingly, Applicants respectfully submit that the arguments made with respect to claim 5 be made with respect to claim 29.

For at least the above reasons, Applicants respectfully submit that I'Anson does not describe each and every element as set forth in claim 29 and thus does not anticipate claim 29.

Since I'Anson does not anticipate claim 29, I'Anson does not anticipate claims 30-32 which depend from claim 29.

Furthermore, claims 30-32 contain patentable subject matter. For example, claims 30 and 31 recite similar language as recited in claims 6 and 7. Accordingly, Applicants respectfully submit that the arguments made with respect to claims 6 and 7 be made with respect to claims 30 and 31.

For at least the above reasons, it is respectfully requested that the rejection under 35 U.S.C. § 102(b) be withdrawn with respect to claims 29-32.

F. Claims 33-35

To maintain an anticipation rejection, I'Anson must describe each and every element as set forth in claim 33. However, I'Anson does not describe each and every element as set forth in claim 33. For example, claim 33 recites "recording a state machine sequence from the state machine", "selecting from the plurality of expected state machine sequences a selected expected state machine sequence that matches the state machine sequence", and "determining the status of the real-time system based on the selected expected state machine sequence". These elements were identically recited in claim 9. Accordingly, Applicants respectfully submit that the arguments made with respect to claim 9 be made with respect to claim 33.

For at least the above reasons, Applicants respectfully submit that I'Anson does not describe each and every element as set forth in claim 33 and thus does not anticipate claim 33. Since I'Anson does not anticipate claim 33, I'Anson does not anticipate claims 34 and 35 which depend from claim 33.

Furthermore, claims 34 and 35 contain patentable subject matter. For example, claims 34 and 35 recite similar language as recited in claims 6 and 7. Accordingly, Applicants respectfully submit that the arguments made with respect to claims 6 and 7 be made with respect to claims 34 and 35.

For at least the above reasons, it is respectfully requested that the rejection under 35 U.S.C. § 102(b) be withdrawn with respect to claims 33-35.

IV. REJECTION UNDER 35 U.S.C. § 102(b) WITH RESPECT TO CLAIMS 4, 16 AND 28

Claims 4, 16 and 28 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,636,244 ("Goodson"). Applicants respectfully traverse the rejection.

To maintain an anticipation rejection, Goodson must describe each and every element as set forth in claims 4, 16 and 28. However, Goodson does not describe each and every element as set forth in claims 4, 16 and 28. For example, claims 4, 16 and 28 each recite "comparing the communications channel transfer function to a standard communications channel transfer function". The Examiner alleges that col. 7, lines 12-60 of Goodson is relevant to an anticipation argument. Applicants strongly disagree. The cited text does not describe a standard communications channel transfer function nor does the cited text describe comparing the communications channel transfer function to the standard communications channel transfer function.

For at least the above reasons, it is respectfully requested that the rejection under 35 U.S.C. § 102(b) be withdrawn with respect to claims 4, 16 and 28.

V. REJECTION UNDER 35 U.S.C. § 103(a) WITH RESPECT TO CLAIMS 1, 13 AND 25

Claims 1, 13 and 25 stand rejected under 35 U.S.C. § 103(a) as being obvious over I'Anson in view of U.S. Patent No. 4,547,633 ("Szechenyi"). Applicants respectfully traverse the rejection.

To maintain an obviousness rejection, each and every element must be taught or suggested by the combination of I'Anson and Szechenyi. In view of the discussions above with respect to claims 5-12, 17-24 and 29-35 and I'Anson, I'Anson fails to teach or suggest much more than, as set forth by the Examiner in the Office Action, "reading a plurality filter coefficients, calculating the quality of the communications channel using the plurality of filter coefficients and diagnosing faults based on the plurality of filter coefficients". Office Action at page 5, section 5. Furthermore, Szechenyi does not make up for the teaching deficiencies of I'Anson.

Thus, for example, the combination of Szechenyi and I'Anson does not teach or suggest at least the following elements which were recited in claims 1, 13 and 25: "recording a state

machine sequence from the state machine during operation of the transceiver"; "normalizing the plurality of expected state machine sequences based on a sample frequency of the state machine sequence"; and "selecting from the plurality of expected state machine sequences a selected expected state machine sequence that best approximates the state machine sequence". At least these elements, many of which were discussed above, were neither described, taught or suggested by I'Anson and, furthermore, were not taught or suggested by Szechenyi, individually or in combination with I'Anson. Accordingly, the combination of I'Anson and Szechenyi does not render obvious the subject matter as set forth in claims 1, 13 and 25.

For at least the above reasons, it is respectfully requested that the rejection under 35 U.S.C. § 103(a) be withdrawn with respect to claims 1, 13 and 25.

VI. REJECTION UNDER 35 U.S.C. § 103(a) WITH RESPECT TO CLAIMS 2, 3, 14, 15, 26 AND 27

Claims 2, 3, 14, 15, 26 and 27 stand rejected under 35 U.S.C. § 103(a) as being obvious over I'Anson in view of Szechenyi as applied to claims 1, 13 and 25, and further in view of Goodson. Applicants respectfully traverse the rejection.

As discussed above, with respect to claims 1, 13 and 25, the combination of I'Anson and Szechenyi does not teach or suggest at least the following elements: "recording a state machine sequence from the state machine during operation of the transceiver"; "normalizing the plurality of expected state machine sequences based on a sample frequency of the state machine sequence"; and "selecting from the plurality of expected state machine sequences a selected expected state machine sequence that best approximates the state machine sequence". Furthermore, Goodson, individually or in combination with I'Anson and Szechenyi, does not teach or suggest at least these elements.

For at least the above reasons, the combination of I'Anson, Szechenyi and Goodson does not render obvious the subject matter as set forth in claims 1, 13 and 25. Since the combination of I'Anson, Szechenyi and Goodson does not render obvious the subject matter as set forth in claims 1, 13 and 25, the combination of I'Anson, Szechenyi and Goodson does not render obvious the subject matter as set forth in claims which depend from claims 1, 13 and 25. Accordingly, the combination of I'Anson, Szechenyi and Goodson does not render obvious the subject matter as set forth in claims 2, 3, 14, 15, 26 and 27.

For at least the above reasons, it is respectfully requested that the rejection under 35 U.S.C. § 103(a) be withdrawn with respect to claims 2, 3, 14, 15, 26 and 27.

VII. CONCLUSION

In view of at least the foregoing, it is respectfully submitted that the pending claims 1-35 are in condition for allowance. Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the telephone number listed below.

Please charge any required fees not paid herewith or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Dated: April 27, 2004

Respectfully submitted,

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